

REMARKS

In the non-final Office Action, the Examiner rejects claims 10-12 and 17-20 under 35 U.S.C. § 103(a) as unpatentable over ANDERSSON et al. (U.S. Patent No. 7,023,846) in view of DWORK (U.S. Patent No. 6,578,080). Applicants respectfully traverse this rejection.¹ Claims 10-12 and 17-20 remain pending.

Independent claim 10 is directed to a method of configuring a networking device. The method includes generating a first forwarding table; generating a second forwarding table; programming a filter to perform a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions; and programming the filter to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions. ANDERSSON et al. and DWORK, whether taken alone or in any reasonable combination, do not disclose or suggest this combination of features.

For example, ANDERSSON et al. and DWORK do not disclose or suggest programming a filter to perform a lookup operation in a first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions and programming the filter to initiate a lookup operation in a second forwarding table if the first field value does not meet one or more conditions of the first set of conditions, as recited in claim 10. The Examiner admits that ANDERSSON et al. does not disclose these features (Office Action, pg. 3). To remedy this deficiency, the Examiner relies on

¹ As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants' silence as to assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine reference, assertions as to dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute such assertions/requirements in the future.

Fig. 6, the abstract, column 10, lines 46-54, and column 10, lines 61-67 of DWORK for allegedly disclosing the above features of claim 10 (Office Action, pp. 3-4). Applicants respectfully disagree with the Examiner's interpretation of DWORK.

In Fig. 6, DWORK illustrates an address filter table that is capable of storing a plurality of entries. Fig. 6 of DWORK discloses a single address filter table. Fig. 6 of DWORK does not disclose or suggest programming a filter to perform a lookup operation in a first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions and programming the filter to initiate a lookup operation in a second forwarding table if the first field value does not meet one or more conditions of the first set of conditions, as recited in claim 10.

In the abstract, DWORK discloses:

An apparatus for programming selected entries in an address filter table allows dynamic updating of address registers and eliminates the need to disable unmodified registers in arrangements including multiple registers or entries. The apparatus comprises an interface for receiving data frames from a remote station. A media access controller is provided with an address filter table capable of storing a plurality of entries. Each entry includes an address field for storing a predetermined target address, and an enable field for indicating whether or not the entry is valid. The media access controller is configured to receive each of the data frames from the interface. The media access controller examines the enable field of each entry in the address filter table to determine whether or not the entry is valid. The received data frames are then routed to a destination address based upon the target addresses stored in the address filter table. A device manager may be used for updating the entries in the address filter table.

This section of DWORK discloses programming selected entries in an address filter table to allow dynamic updating of address registers. This section of DWORK does not disclose or suggest performing a lookup operation in a first forwarding table and performing a second lookup operation in a second forwarding table. Therefore, this section of DWORK does not disclose or suggest programming a filter to perform a

lookup operation in a first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions and programming the filter to initiate a lookup operation in a second forwarding table if the first field value does not meet one or more conditions of the first set of conditions, as recited in claim 10.

At column 10, lines 44-55, DWORK discloses:

For example, if the target address in entry #2 of the address filter table 150 contains a value of 07-01-02-03-45-67 and the corresponding mask field 164 contains a value of 00-00-00-00-00-11, then received data frames 134 having a destination address ranging from 07-01-02-03-45-00 to 07-01-02-03-45-FF will be accepted or routed.

The destination address of each incoming data frame 134 is compared with valid entries 152 (i.e., those entries whose enable fields contain a value of 1) for a possible match. If the enable field 170 is invalid, i.e., contains a value of 0, then the entry 152 is ignored.

This section of DWORK discloses accepting and routing data frames based on a target address and mask field of an entry. If an enable field is invalid (e.g. its value is "0", an entry is ignored. This section of DWORK does not disclose or suggest performing a lookup operation in a first forwarding table and performing a second lookup operation in a second forwarding table. Rather, this section of DWORK merely discloses applying a mask filter to incoming data for the purposes of determining its destination. Therefore, this section of DWORK does not disclose or suggest programming a filter to perform a lookup operation in a first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions and programming the filter to initiate a lookup operation in a second forwarding table if the first field value does not meet one or more conditions of the first set of conditions, as recited in claim 10.

At column 10, lines 61-67, DWORK discloses:

If one of the entries 152 in the address filter table 150 has several of its mask bits set so that the entry 152 refers to a range of addresses, a device manager 212 (see FIG. 7) may be configured to use the perfect match field 168 for indicating whether or not the destination address of the incoming data frame 134 has been filtered, i.e., routed based on a range of addresses as opposed to one individual address.

This section of DWORK discloses that, if one of the entries in the address table field has several of its mask bits set so that the entry refers to a range of address, a device manager may be configured to use a perfect match field to indicate whether or not the destination address of the incoming data frame has been filtered. This section of DWORK does not disclose or suggest performing a lookup operation in a first forwarding table and performing a second lookup operation in a second forwarding table. Therefore, this section of DWORK does not disclose or suggest programming a filter to perform a lookup operation in a first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions and programming the filter to initiate a lookup operation in a second forwarding table if the first field value does not meet one or more conditions of the first set of conditions, as recited in claim 10.

For at least the foregoing reasons, Applicants submit that claim 10 is patentable over ANDERSSON et al. and DWORK, whether taken alone or in any reasonable combination.

Claims 11 and 12 depend from claim 10. Therefore, these claims are patentable over ANDERSSON et al. and DWORK, whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 10.

Independent claim 17 recites features similar to (yet possibly of different scope than) features described above with respect to claim 10. Therefore, Applicants submit that claim 17 is patentable over ANDERSSON et al. and DWORK, whether taken alone

or in any reasonable combination, for at least reasons similar to reasons given above with respect to claim 10.

Claims 18-20 depend from claim 17. Therefore, these claims are patentable over ANDERSSON et al. and DWORK, whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 17.

In view of the foregoing remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

While the present application is now believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise which could be eliminated through discussions with Applicants' representative, then the Examiner is invited to contact the undersigned by telephone to expedite prosecution of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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